Introduction of a maternity-triage system to a Northern UK-based Tertiary teaching hospital

L Jayagovarthanan, C Noor, N Graham

Manchester University NHS Foundation Trust

OBJECTIVE

Introduction of the BSOTS system (Birmingham Symptom-specific Obstetric Triage System) to a tertiary level hospital split across two main sites and aim to :

- Improve quality of triage assessment.
- Aid timely triage review.
- Use a standardized approach and shared language.
- To improve unit through-put and patient safety.

DESIGN

Prospective audit was conducted to ensure compliance to BSOTS principles of a brief and prompt assessment of women within 15 minutes of attendance and allocation of a category of urgency using BSOTS algorithms and to evaluate the outcome of implementation.

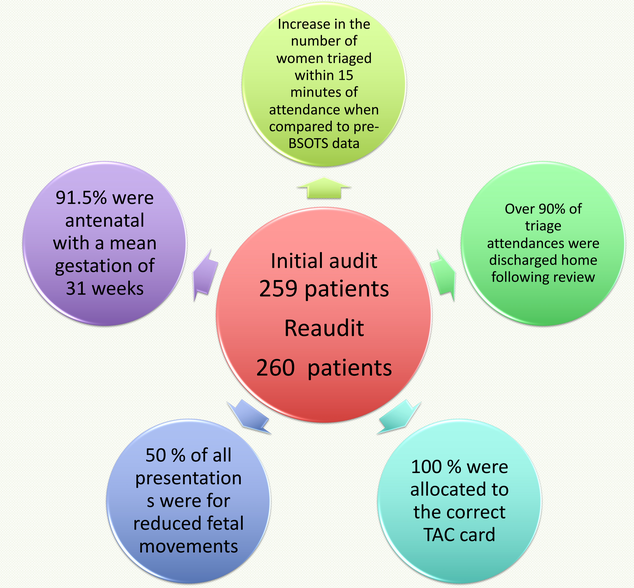
Audit was undertaken at 4 months and 11 months following introduction.

METHOD

- Random sample of 10 % of monthly attendances to maternity triage.
- 12 standards included which align with BSOTS targets.

BSOTS TARGET	Compliance At 4 months (December 2020)	Compliance At 11 months (July 2021)	Improvement Seen
Standard 1 Triage within 15 mins	63.3%	44.6%	No
Standard 2 Allocation to 8 specific TAC	100%	100%	Same
Standard 3 Level of urgency assigned	88.4%	90.4%	Yes
Standard 4 Women defined as RED reviewed immediately	No data	100%	Yes
Standard 5 Women defined as ORANGE reviewed within 15 mins	60%	41.2%	No
Standard 6 Women defined as YELLOW reviewed within 1 hour	69.3%	52.1%	No
Standard 7 Women defined as GREEN reviewed within 4 hours	89.4%	90.9%	Yes
Standard 8 RED or ORANGE women in Treatment room	No data	59.6%	Yes
Standard 9 RED Women reviewed by senior Obstetric/ Anaesthetic Staff	No data	100%	Yes
Standard 10 ORANGE women reviewed by ST3-7 or above	12.7%	56%	Yes
Standard 11 YELLOW or GREEN reviewed by ST!-2 or above	62.1%	94.7% and 100%	Yes
Standard 12 All data completed on the TAC	7.7%	42.7%	Yes

RESULTS



Changes implemented following first Audit

- Midwifery shift patterns
- Unit layout
- Place of review

Improvements were observed in 8 of the 12 standards

- No difference in one standard which already achieved 100%

Improvements reflect

- Ongoing education
- Familiarity and understanding of the BSOTS system amongst staff
- Enhanced documentation
- Improved recognition of clinical urgency
- Encouragement of upward escalation for review

CONCLUSIONS

- Overall, the BSOTS principles are being applied correctly and the system being used as it was designed to be.
- It was successfully implemented whilst facing the challenges of a global pandemic.
- There has been no increase in unit footprint or staffing numbers yet overall, there is notable improvement in the work organization and practices including clinical prioritization by level of urgency, communication at handover, and standardization of care for women in high-risk categories.